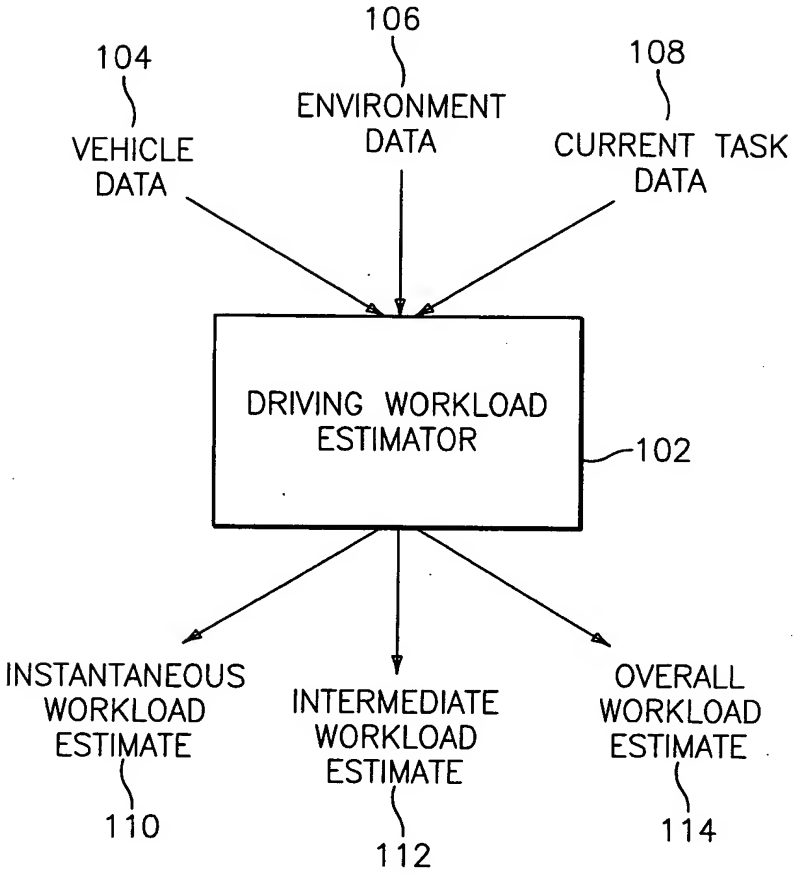
106
104
ENVIRONMENT DATA
108
VEHICLE DATA
CURRENT TASK DATA
DRIVING WORKLOAD ESTIMATOR
102
INSTANTANEOUS WORKLOAD ESTIMATE
110
INTERMEDIATE WORKLOAD ESTIMATE
112
OVERALL WORKLOAD ESTIMATE
114

FIG. 1

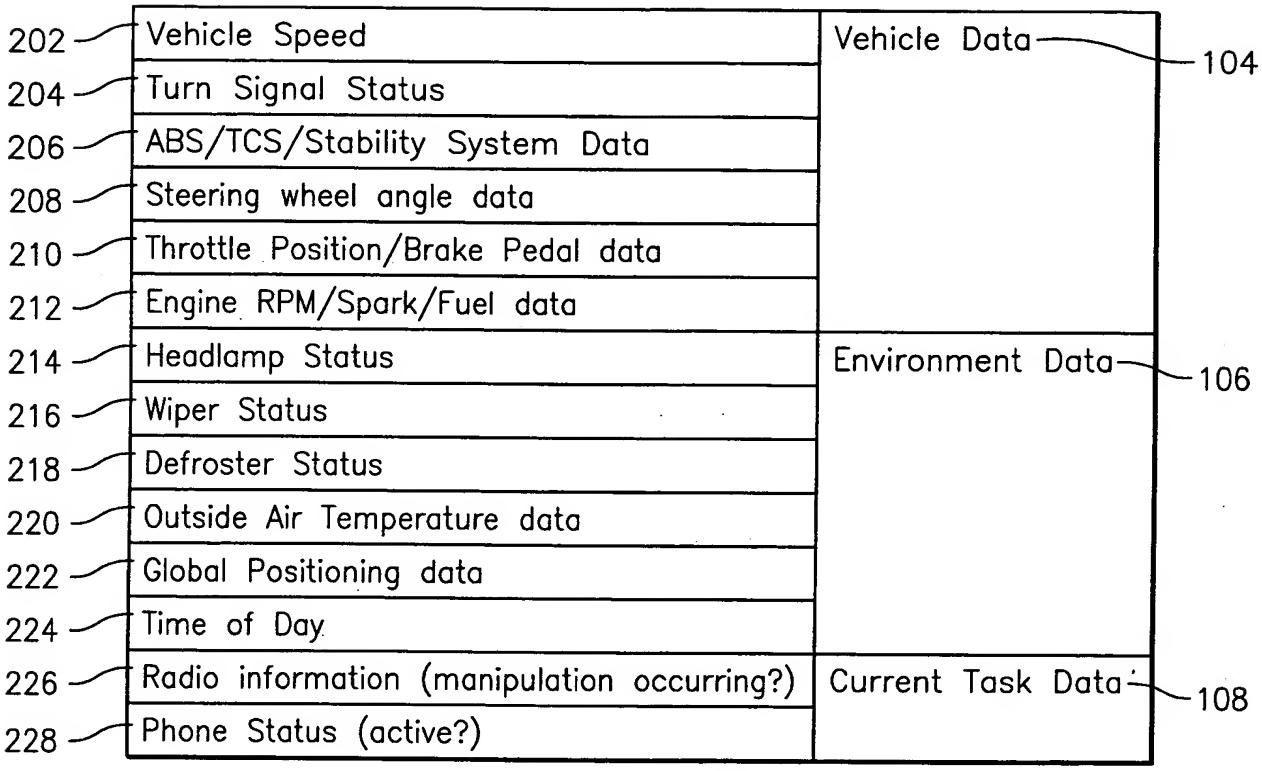
202
Vehicle Speed
204
Turn Signal Status
206
ABS/TCS/Stability System Data
208
Steering wheel angle data
210
Throttle Position/Brake Pedal data
212
Engine RPM/Spark/Fuel data
Vehicle Data
104
214
Headlamp Status
216
Wiper Status
218
Defroster Status
220
Outside Air Temperature data
222
Global Positioning data
224
Time of Day
Environment Data
106
226
Radio information (manipulation occurring?)
228
Phone Status (active?)
Current Task Data
108

FIG. 2

	Input	Relative Workload Effect–Logical Operands	
202	Vehicle Speed	70 mph > 50–70 mph	302
		50–70 mph > 20–50 mph	
		20–50 mph > 0–20 mph	
204	Turn Signal Status	Lane Change > Lane Maintenance	304
		Turn > Maintain Straight heading	
206	ABS/TCS/Stability	ABS/TCS + Stability active > ABS/TCS	306
		Stability active > not active	
		ABS/TCS active > not active	
214	Headlamp Status	Night > Day	308
216	Wiper Status	Precipitation > None	310
220	Outside Air Temperature	Snow > Rain	312
224	Time of Day	Periodic function to reflect greater risk of driving at certain times of the day.	314
226	Radio Information	Manipulating radio > No Radio Task	316
228	Phone Status	Phone dialing/conversation > None	318

FIG. 3

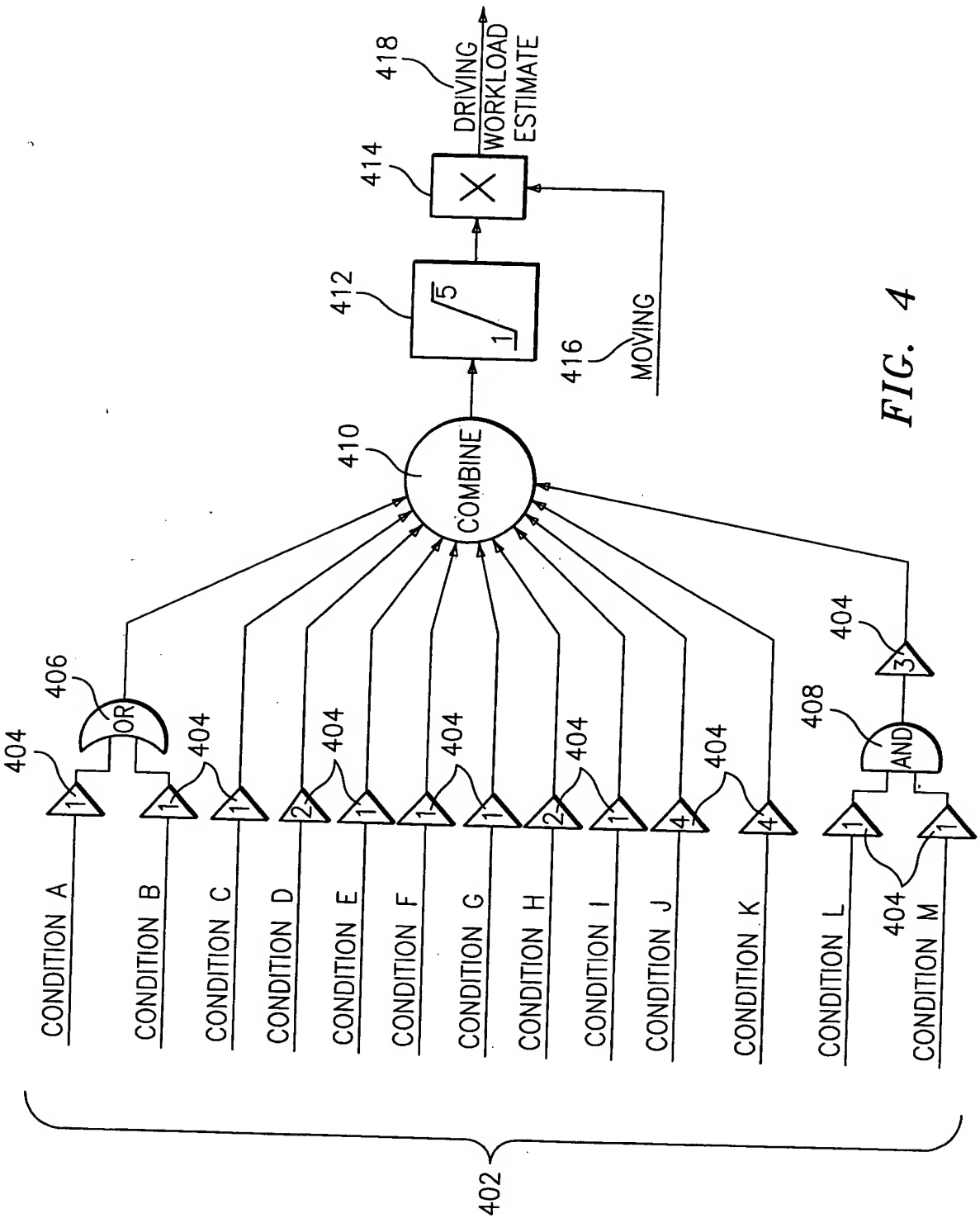
402
CONDITION A
CONDITION B
CONDITION C
CONDITION D
CONDITION E
CONDITION F
CONDITION G
CONDITION H
CONDITION I
CONDITION J
CONDITION K
CONDITION L
CONDITION M
404
406
OR
408
AND
410
COMBINE
412
5
1
414
X
416
MOVING
418
DRIVING WORKLOAD ESTIMATE

FIG. 4